9110-04-P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

[Docket No. USCG-2021-0827]

Use of Wing-in-Ground Craft in Logistical Support of Offshore Platform Operations

AGENCY: Coast Guard, Department of Homeland Security (DHS).

ACTION: Request for information.

SUMMARY: The U.S. Coast Guard seeks input from the public on wing-in-ground (WIG) craft. This information will support the Coast Guard's compliance with Section 8431 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021. In addition, public input will help in assessing the current state of WIG craft development and the technology to provide transportation support to offshore energy facilities on the U.S. Outer Continental Shelf. Finally, public input will aid in developing a plan to demonstrate WIG craft capability to conduct such operations.

DATES: Comments must be received by the Coast Guard on or before [INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments using the Federal Decision Making Portal at *https://www.regulations.gov*. See the "Public Participation and Request for Comments" portion of the **SUPPLEMENTARY INFORMATION** section for further instructions on submitting comments.

FOR FURTHER INFORMATION CONTACT: For information about this document, call or email Lieutenant Commander Dimitri Wiener, U.S. Coast Guard; telephone 202-372-1414, email dimitrios.n.wiener@uscg.mil.

SUPPLEMENTARY INFORMATION:

I. Public Participation and Comments

The Coast Guard views public participation as essential to understanding the current state of wing-in-ground (WIG) craft development and technology, their potential ability to operate on coastwise and offshore routes, and the Coast Guard's role with regard to such technologies. The Coast Guard will consider all information, comments, and material received during the comment period. If you submit a comment, please include the docket number for this notice, indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation.

Methods for submitting comments. We encourage you to submit comments through the Federal Decision Making Portal at www.regulations.gov. To do so, go to www.regulations.gov, type USCG-2021-0827 in the search box and click "Search." Next, look for this document in the **Search Results** column, and click on it. Then click on the **Comment** option. If your material cannot be submitted using www.regulations.gov, contact the person in the **FOR FURTHER INFORMATION CONTACT** section of this document for alternate instructions. Public comments will be in our online docket at www.regulations.gov and can be viewed by following that website's instructions, provided on its Frequently Asked Questions page. We review all comments received, but we will only post comments that address the topic of this request for information. We may choose not to post off-topic, inappropriate, or duplicate comments that we receive.

The Coast Guard will not issue a separate response to the comments received. We will carefully consider all comments and may use them to form recommendations to Congress. The Coast Guard is not currently contemplating regulatory changes on this topic; if the Coast Guard were to undertake any regulatory changes as a result of comments received, that change would be separately announced in the **Federal Register**.

Personal information. We accept anonymous comments. Comments we post to

www.regulations.gov will include any personal information you have provided. For more about privacy and submissions to the docket in response to this document, see the Department of Homeland Security's (DHS) eRulemaking System of Records notice (85 FR 14226, March 11, 2020).

II. Abbreviations

FAA	Federal Aviation Administration
FR	**Federal Register**
NDAA	William M. (Mac) Thornberry National Defense Authorization Act
OCS	U.S. Outer Continental Shelf
RFI	Request for information
U.S.C.	United States Code
WIG	Wing-in-ground

III. Purpose

The Coast Guard is issuing this request for information (RFI) in response to Section 8431 of the William M. (Mac) Thornberry National Defense Authorization Act (NDAA) for Fiscal Year 2021, Public Law 116-283. In that section, Congress required the Coast Guard, in coordination with the Federal Aviation Administration (FAA), to develop plans for a demonstration program that will determine whether a WIG craft, carrying at least one individual, is capable of the following:

(1) Providing transportation in areas in which energy exploration, development, or production activity takes place on the Outer Continental Shelf; and

(2) Safely reaching helidecks or platforms located on offshore energy facilities under the WIG craft's own power.

Congress directed that Coast Guard and the FAA report on, among other things, any regulatory changes with regard to inspections or manning that would be necessary to allow for craft operation between onshore and offshore facilities, any regulatory changes with regard to airspace and other aircraft operations necessary to allow for safe operations on or near helidecks and platforms on offshore energy facilities, and any other statutory or regulatory changes related to FAA authority over craft operation.

The Coast Guard will use the public comments received in response to this RFI as the first step in developing a WIG craft demonstration program, and to better understand the state of WIG craft development.

IV. Background—Wing-in-Ground (WIG) Craft

As statutorily defined in 46 U.S.C. 2101(54), a WIG craft is "a vessel that is capable of operating completely above the surface of the water on a dynamic air cushion created by aerodynamic lift, due to the ground effect between the vessel and the water's surface." As defined in 46 U.S.C. 2101(45), WIG craft that can carry one or more passengers for hire are "small passenger vessels," and are regulated as such by the Coast Guard.

A WIG craft relies on *ground effect*, an aerodynamic effect that creates an air cushion between the craft's wings and the surface. When a WIG craft is operating very close to the surface and under the influence of ground effect, there is a reduction in the upwash, downwash, and wingtip vortices generated by its wing that results in a condition of improved performance. As a result of the reduced wingtip vortices, there is a reduction in induced drag. Operating within ground effect significantly improves a craft's performance when its wing is at a height of about one-half its wingspan or less above the surface. Accordingly, a WIG craft cannot fly very far above the surface before it loses the advantage of ground effect. It may also not be able to maintain sustained flight at higher altitudes.

When operating within ground effect, the reduced drag allows WIG craft to carry a payload with less propulsion energy than would be required by an aircraft operating out of ground effect. Operating within ground effect and not in contact with the surface also permits a WIG craft to operate at higher speeds than conventional watercraft. This makes WIG craft particularly attractive for passenger service on waterway routes.

Because WIG craft can operate very close to the surface, and because waterways provide an effective operational route for WIG craft, Congress has made the legislative choice to designate WIG craft as vessels when operating in the maritime domain. Accordingly, the Coast Guard has statutory responsibility for the certification and regulation of WIG craft that operate on U.S. waters. This authority, however, is not exclusive, and does not restrict the ability of any other agency, such as the FAA, from regulating these craft when their operation falls within its statutory jurisdiction.

V. Request for Information

The Coast Guard requests relevant comments and information from the public, and particularly from offshore facility operators, including gas and oil facility operators, wind farm operators, the WIG craft community (designers, manufacturers, and operators), and persons conducting operations in airspace that may be affected by the operation of WIG craft.

When considering your comments and suggestions, we ask that you keep in mind the Coast Guard's mission to ensure a safe, secure, and resilient marine transportation system that facilitates commerce and protects national security interests. Commenters should feel free to answer as many questions as they would like, but also provide specificity, detail, and the logic behind any finding or numerical estimates.

The following information is requested; please provide as much detail as possible:

(1) From offshore facility operators:

(a) What interest is there in participating in a WIG craft demonstration?

(b) What are the potential advantages, drawbacks, and concerns, cost-related or otherwise, with respect to using WIG craft for transportation support?

(c) What is the feasibility of a WIG craft to safely land and take off from a helideck (airborne mode), or to taxi up to an offshore platform (afloat mode)?

(d) What modifications to offshore platforms would be required in order to enable such operations?

(2) From the WIG craft community:

(a) What is the current state of WIG craft development, both domestic and foreign?

(b) What WIG craft are currently available, or will be available within 1 year, for an operational demonstration to an offshore platform?

(c) What are the capabilities of existing WIG craft to reach helidecks or platforms located on offshore energy facilities, and how many existing WIG craft are operational for any route, or working prototypes under test and evaluation, or designs in progress?

(d) What are the dimensions and operational characteristics of WIG craft; for example, speed, range, ground effect altitude, and passenger and cargo capacity?

(e) What are the weather and other factors that might limit WIG craft operations on exposed offshore routes?

(f) What are the costs and time estimates to manufacture WIG craft, and what resources are needed to manufacture them; for example, personnel, equipment, and raw material?

(3) In general, from both offshore facility operators and the WIG craft communities:

(a) What are the resources needed to plan and conduct a demonstration of offshore WIG craft operations?

(b) What would be the milestones and timeframe to conduct such a demonstration?

(4) Should current aircraft, airman, air carrier, and commercial operator requirements, as set forth in 49 U.S.C. and Title 14 of the Code of Federal Regulations

apply to the certification and operation of WIG craft? (Note: 49 U.S.C. 40102(a)(6) defines an "aircraft" as "any contrivance invented, used, or designed to navigate, or fly in, the air.") If current requirements should be revised, please indicate what changes would be considered necessary.

(5) Are any additional regulatory, guidance, or policy changes needed to facilitate development of a domestic WIG industry? Where appropriate, please include why the changes are necessary.

(6) What is the predicted growth and scope of the WIG craft technology in terms of its domestic deployment in industry?

(7) Regarding credentialing:

(a) Should WIG operators be required to hold a Merchant Mariner Credential with the appropriate route and tonnage limitations for the vessel?

(b) Should current airman certification requirements apply to the operation of WIG craft? If current requirements should be revised, please indicate what changes would be considered necessary (e.g. category and class ratings, aeronautical knowledge, flight proficiency, aeronautical experience).

(c) Should WIG credentials be one endorsement that covers both the maritime and aviation aspects, or should there be individual certificates or endorsements for each aspect?

(d) Should aviation or maritime simulation training be required to obtain certification or an endorsement to conduct WIG operations?

(f) Should aeronautical experience be credited toward any service requirements to qualify for a WIG endorsement?

(g) If credit for aeronautical experience is to be given, what is the appropriate conversion of flight time to maritime service time?

(8) Finally, the Coast Guard seeks public comments on WIG craft development and technology and their potential ability to operate on coastwise and offshore routes that may not be covered in the questions above.

Dated: July 29, 2022.

W. R. Arguin,
Rear Admiral, U. S. Coast Guard,
Assistant Commandant for Prevention Policy.

[FR Doc. 2022-16626 Filed: 8/2/2022 8:45 am; Publication Date: 8/3/2022]